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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/672,727	09/25/2003	Yasushi Mochizuki	CFA 00030 US	9429

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Canon U.S.A. Inc.
Intellectual Property Department
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EXAMINER

AMINI, JAVID A

ART UNIT	PAPER NUMBER
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2672

DATE MAILED: 03/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/672,727

Applicant(s)

MOCHIZUKI ET AL.

Examiner

Javid A. Amini

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 December 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) _____ is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Arguments

Applicant's arguments filed 12/22/2005 have been fully considered but they are not persuasive.

Applicant on page 10 of the remarks refers to paragraph 0076 of the specification, and Applicant believes that the term "non-linear" can be found in paragraph 0076.

Examiner's reply: the paragraph does not provide enough information about the changes in the position/size between two frames is considered as non-linear. Arguendo, maybe Applicant means in fig. 14A the line A is considered as a linear and the other two curves B and C are considered as non-linear, since they are not straight lines. The rejection of 35 USC 112 first paragraph is still maintained.

Applicant on the same page argues about 35USC 101 rejection.

Examiner's reply: The 35USC 101 rejection has been withdrawn.

Applicant on pages 11-12 argues about 35USC 102(b) rejection.

Examiner's reply: The 35USC 102(b) rejection has been withdrawn.

Applicant on page 12 argues regarding the rejections under 35 USC 103, that a prima facie case of obviousness has not been established. There is no motivation in the references themselves.

Examiner's reply:

- The summary of current invention is related to an image processing method, an image processing apparatus, and a printing apparatus for printing out a plurality of images obtained from moving image data.

- The summary of the Jeongs' invention is related to a direct accessing apparatus and method of a disk recording and reproducing system, and more particularly, to a direct access apparatus in a disk recording and reproducing system, in which a specific image corresponding to the start portion of a continuous image is captured from the continuous image, and the specific image is then recorded on a specific recording area of a disk together with index image information corresponding to the specific image, so that the position of a corresponding moving image can be directly accessed using index image information in a reproduction mode, and to a direct access method thereof.
- The summary of the Hieda's invention is related to an image pickup device, and more particularly to such a device adapted for obtaining both moving image and still images.

Examiner's comments: from underlined above according to their summary of the inventions, the current application and the other two references are captured images from moving image.

Therefore, there is a motivation in the references to combine or to modify the references teachings. Jeong in fig. 5 illustrates capturing still image i.e. similar to what Applicant claimed as "designates trimming areas". Also in fig. 3 shows an example of decimated (i.e. equivalent to trimming) images frame by frame. The unanswered Examiner's question from previous office action page 5 first paragraph repeated here: regarding the term that Applicant uses in claim 1, "at least two frames", does applicant mean a specific application associated with the two frames or simply, Applicant sets a value (i.e. threshold value) to distinguish between two frames?

Jeong in fig. 3 illustrates a plurality of frames i.e. referred as index frames, and can be selected by the frame i.e. equivalent to predetermined number of frames, from any scene in fig. 6. The claim invention covers broad language e.g., it does not specify the differences between the

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plurality of frames and the predetermined number of frames, because the predetermined number of frames can be equal to the plurality of frames. Jeong in fig. 6 covers what the claim 1 generates the predetermined number of frames from the index frames.

Examiner's suggestion: Applicant should be more explicit toward the invention, e.g., cuts out the predetermined number of frames is not clear whether Applicant means a portion of the frame as illustrates in fig. 12 or the whole frame. The claim limitation of "extract the trimming areas" needs redefining in the claim invention.

Applicant on page 13 at 2-4 paragraphs argues that would have not been obvious to one of ordinary skill in the art at the time of the invention to modify Hieda's bandwidth of color signal into Jeong's work in order to prevent color blotting, color aberration or deterioration in the color reproducibility.

Examiner's reply: The bandwidth is the amount of data that can be passed along a communications channel in a given period of time. Therefore the higher the bandwidth causes a transmission medium handles higher graphics with more detail data. It's obvious for a person skill in the art printing the still images from both references.

Applicant on page 13 last paragraph argues that the Jeong reference does not teach "designating a desired range of moving image data ". Furthermore, the Jeong reference does not teach the trimming areas.

Examiner's reply: the limitation in the following lines: "designating means which designates least two frames from a predetermined number of frames to be cut out from the range designated by said designating means". Jeong in the abstract specifically designating specific images in the start portions of continuous images. Applicant does not respond to the one of the

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question that raised in previous office action (page 5, first paragraph). The question is repeated, as follows: Examiner's question regarding the term that Applicant uses in claim 1, "at least two frames", does applicant mean a specific application associated with the two frames or simply, Applicant sets a value (i.e. threshold value) to distinguish between two frames?

Jeong at cols. 5-6, lines 59-67; 1-4 respectively, teaches selecting or trimming by detecting signal as predetermined reference value or set value or threshold value.

Note: the claim language in claim 1 does not explicitly specify the frames are captured from moving image, (see preamble of claim 1).

Examiner's suggestion: Encourages Applicant to schedule an interview.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 6, 22, 28 and 34 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claims 6 and 22 contain a term "non-linearly" that does not describe in the specification. Examiner needs more information in order to examine the claim language "non-linear", because non-linear systems are mathematically represented systems whose behavior is not expressible as a linear function of its descriptors; that is, such systems are not linear. The claim limitations are: "wherein said setting

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step non-linearly changes the position and/or the size the frame existing between the two designated frames”. Applicant needs describing well in detail, the significant of changes in the position and size between the two frames as non-linearly. Applicant refers to paragraph 0076 of the specification, however the paragraph does not provide enough information about the changes in the position/size between two frames is considered as non-linear.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-36 rejected under 35 U.S.C. 103(a) as being unpatentable over Jeong et al. US Patent 6,690,878 B1 (hereinafter refers as Jeong), and further in view of Hieda US patent 6,204,878 B1.

Claim 1.

Jeong at col. 1, lines 9-20 teaches the desired range of moving image, i.e. continuous image, Jeong discloses a direct accessing apparatus and method of a disk recording and reproducing system, and more particularly, to a direct access apparatus in a disk recording and reproducing system, in which a specific image corresponding to the start portion of a continuous image is captured from the continuous image, and the specific image is then recorded on a specific recording area of a disk together with index image information corresponding to the specific image, see the preamble of the claim invention, as follows: “An image processing apparatus

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comprising: designating means which designates a desired range of moving image data comprising a plurality of frames”.

Jeong at cols. 5-6, lines 59-67; 1-4 respectively, teaches selecting or trimming by detecting signal as predetermined reference value or set value or threshold value, i.e. determined to have switched between two frames, see the limitation in the following lines: “designating means which designates least two frames from a predetermined number of frames to be cut out from the range designated by said designating means”. Jeong in the abstract specifically designating specific images in the start portions of continuous images. Examiner’s question regarding the term that Applicant uses in claim 1, “at least two frames”, does applicant mean a specific application associated with the two frames or simply, Applicant sets a value (i.e. threshold value) to distinguish between two frames?

Jeong at col. 3, lines 30-46 teaches capturing still images from the encoded video data at predetermined time intervals, see following claim limitation: “setting means which sets the trimming areas predetermined number frames be out based on the trimming areas designated by said designating means”.

Jeong at cols. 5-6, lines 59-67; 1-4 respectively, teaches the following claim limitations of “generating means which out the predetermined number of frames from the range designated said designating means, extracts the trimming areas set said setting means, and generates a predetermined number of continuous images;” as Jeong discloses at mentioned cols. 5-6, lines 59-67; 1-4 respectively, a process for effectively generating and recording image index information will now be described. Video encoder 100 receives and encodes video data as a data recording command is applied. Then, the scene switch detector 131 periodically detects scene-

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switching spots from the encoded video data at predetermined time intervals and generates a scene switch detection signal. Here, many methods of detecting scene switching spots are well-known, among which the most general method is that differential information between screen frames is calculated, and when the calculated differential information exceeds a predetermined reference value, a scene is determined to have switched between two screen frames. As the following claim limitation claims “printing control means which prints the continuous images generated said generating means”, the reference Jeong does not explicitly specify printing device, however, Hieda under subject of related background art discloses generating a still image for computer display or for printed reproduction. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to substitute applicant’s described claim invention by modifying Hieda’s wide bandwidth of color signal into Jeong’s work in order to prevent in the still and moving images, such as color blotting, color aberration or deterioration in the color reproducibility.

Claim 2.

An image processing apparatus according to Claim 1, wherein the trimming areas are designated to a start frame end frame from the predetermined number of frames to be cut out.

Jeong at col. 4, lines 30-43 teaches as the video blank detection signal is applied, the image capturer 122 captures the very next still image after the detected video blank section, from the output signal of the video encoder 100. Then, the image scale reducer 123 decimates the still image signal captured by the image capturer 122, in a predetermined ratio.

Claim 3.

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Jeong in fig. 5 steps S140-S150 illustrates the limitation for the following claim invention:

“wherein said designating means displays images corresponding to the two frames and further displays frames indicating the trimming areas in the image”.

Claim 4.

Jeong in fig. 2 the image scale reducer labeled as 123, illustrates a type of trimming, but Jeong does not explicitly specify the term “gradually changed”, however, Jeong at col. 4, lines 24-29 teaches a fade out/in options, meaning gradually changing, see following claim language:

“wherein said setting means determines the trimming areas so the designated trimming areas are gradually changed for the frames existing between the two frames to which the trimming areas are designated by said designating means”. Examiner’s suggestion: Applicant needs to be more detailed explaining: what does gradually change, is a level of luminance signal changed or etc.?

Claim 5.

An image processing apparatus according to Claim 4, wherein said setting means proportionally changes the position and/or the size the trimming area of the frame existing between the two designated frames. Jeong in the abstract teaches a continuous image, which is corresponding to moving image. The moving image must contain more than two frames, i.e. the image data have changed from frame to frame, and it’s obvious that the moving image changes the position of the designated frames.

Claim 6.

It is obvious the image data changed non-linearly, e.g. two moving objects (i.e. not related to each other) in a continuous image change the positions non-linearly. The claim limitation is as follows: An image processing apparatus according to Claim 4, wherein said setting means non-

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linearly changes the position and/or the size the frame existing between the two designated frames.

Claim 7.

Jeong at col. 3, lines 34-35 teaches capturing still images from the encoded video data at predetermined time intervals. The claim is as follows: An image processing apparatus according to Claim 1, further comprising: display control means which switches and displays the predetermined number of the continuous still images generated by said generating means in the appearance order of the moving image data.

Claim 8.

Jeong at col. 5, lines 8-23 teaches each menu screen formed by editing decimated images in units of a screen is numbered, and each of the decimated pictures is provided with a scene number. As shown in FIG. 6, each menu screen includes k scenes, and each of the scenes is set to have a unique screen coordinate within a menu screen. Position information on an area of a disk on which each menu screen is recorded, that is, a storage address, is matched with each menu screen. To be more specific, addresses at which a continuous image including still images specified by scene numbers is to be reproduced are matched with the scene numbers for the decimated images. The claim language is as follows: An image processing apparatus according to Claim 7, wherein the same window realizes a range designating operation of said designating means and a display operation said display control means.

Claim 9.

Jeong in fig. 3 designates a range from 1-12 scenes, starting with scene 1 and ending with scene 12.

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Claims 10-12.

Jeong at col. 4, lines 30-36 teaches periodically detects a video blank section at predetermined time intervals, thus generating a video blank detection signal.

Claim 13.

An image processing apparatus according to Claim 11, wherein said setting means sets the time required from the start to the end of the continuous still images. Jeong at col. 4, lines 52-57 teaches to allow a movie to be directly accessed in units of 10 minutes.

Claim 14.

An image processing apparatus according to Claim 11, wherein said setting means sets a switching time interval of the continuous still images. Jeong in fig. 6 shown each menu screen includes k scenes, and each of the scenes is set to have a unique screen coordinate within a menu screen.

Claim 15.

An image processing apparatus according to Claim 11, wherein the continuous images are switched accordance with the movement of a cursor as a pointing device. The step is obvious because Jeong at col. 5, lines 8-22 teaches ach menu screen formed by editing decimated images in units of a screen is numbered, and each of the decimated pictures is provided with a scene number. As shown in fig. 6, each menu screen includes k scenes, and each of the scenes is set to have a unique screen coordinate within a menu screen.

Claim 16.

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See rejection of claim 1, the step is as follows: An image processing apparatus according to Claim 1, further comprising: recording means which records the continuous still images under the control said printing control means.

Claim 17.

See rejection of claim 1.

Claim 18.

See rejection of claim 2.

Claim 19.

See rejection of claim 3.

Claim 20.

See rejection of claim 4.

Claim 21.

See rejection of claim 5.

Claim 22.

See rejection of claim 6.

Claims 23-34.

Jeong in fig. 1 shows a storage unit labeled 110. In fig. 2 illustrates a micro-processor labeled 125.

Claims 35-36.

See rejection of claim 4.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Javid A. Amini whose telephone number is 571-272-7654. The examiner can normally be reached on 8-4pm.

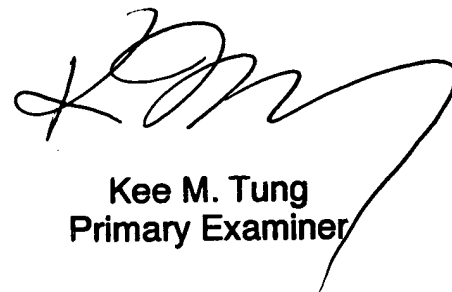
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kee Tung can be reached on 571-272-7794. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Javid A Amini
Examiner
Art Unit 2672

Javid Amini



Kee M. Tung
Primary Examiner